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WINSLOW-LINDBERGH REGIONAL AIRPORT

Winslow, Arizona

AIRPORT MASTER PLAN - 1998
APPENDIX B - PAC MEETING MINUTES AND PUBLIC INVOLVEMENT

Gannett Fleming

MEETING MINUTES
WINSLOW MUNICIPAL AIRPORT
MASTER PLAN

P.A.C. MEETING NO. 1

Date: October 20, 1997

Attendees:	Ron Schreier	Gannett Fleming, Inc.
	Nick Pela	Nicholas J. Pela & Associates
	John Roche	City of Winslow
	Steve Haydukovich	City of Winslow
	Gary Carlson	City of Winslow
	Harold D. Soehner	Winslow City Council/Pilot
	Robert Mansell	Pilot
	Jim Boles	Mayor, City of Winslow
	Don E. McDaniel	City of Winslow
	Kay E. Schurkens	City of Winslow

Minutes Prepared By: Ron Schreier

The meeting discussion followed the agenda attached. The major points of discussion are noted below:

I. Introductions

The attendees introduced themselves prior to the presentation by the consultants.

II. Review of PAC Process

Using a presentation board Ron Schreier explained the Planning Advisory Committee (PAC) process. Generally, the consultants will present a series of working papers to the Committee. Working papers will be sent to the committee in advance for review prior to the scheduled PAC meeting. At each meeting new working papers will be presented. Comments by committee members may result in the working papers being revised for the subsequent meeting. At the subsequent meeting we will ask that the revised working paper(s) be accepted by vote of the committee. Once all working papers have been accepted, they are compiled into the draft final report for final approval. There will be four PAC meetings.

III. Section I: Introduction, Background and Inventory

A. History:

Ron briefly summarized the contents of the history portion of Section I (pages 1-1 to 1-5). This section includes a narrative of factors that led to the development of Winslow Municipal Airport.

Page 1-5 describes the present use and facilities at the airport.

Winslow Municipal Airport is included in the National Plan of Integrated Airport Systems (NPIAS), making it eligible for FAA funds. Its NPIAS role is "general aviation". Generally, airports within the NPIAS must be at least 30 miles away from each other. Holbrook Municipal is approximately 34 miles away.

Page 1-6 describes the contents of the FAA Terminal Area Forecasts (TAF). Among the statements made are the Winslow Municipal Airport had 10 based aircraft in 1991 and 28,000 total operations. The TAF forecasts 39,000 total operations by 2005.

The TAF indicates an increase in air carrier enplanements in Arizona between 1987 and 1991 and enplanements will continue to grow at 5% through 2005. Operations by scheduled airlines within Arizona increased as well and will continue to increase as would total aircraft operations. Essentially, the Arizona aviation economy appears to be healthy.

Pages 1-7 and 1-8 discuss the 1998 Arizona Aviation System Plan, the 1995 State Aviation Needs Study and the Arizona Airport Activity Surveys of 1983 and 1985.

A Master Plan for the Airport was completed in 1979 and again in 1987. No major airport improvements were recommended in the 1987 Master Plan.

The latest FAA-approved Airport Layout Plan was dated 1981.

Pages 1-9 and I-10 list the major actions undertaken at the Airport.

Ron asked the committee if there were comments on the material presented thus far.

Gary Carlson had comments as follows:

On page 1-5, the ASOS frequency is incorrect.

On page 1-5, add that Runway 4-22 has Runway End Identifier Lights (REILs). Runway 11 has REILs.

There will be a 14-foot high antenna mast on the water tower near the VOR, four or five miles west of the airport.

B. Inventories:

Ron explained the inventories that were performed in July 1997 for the condition of the airport facilities. A rating of good, fair, or poor was given to each facility. A facility rated good is assumed to be adequate and needing only routine maintenance in the next 20 years. Fair means the facility will require a major upgrade in the next 20 years, and poor indicates the facility is currently not adequate for its intended use.

Ron explained that the airport pavements received a visual examination by ATL, Inc., a geotechnical engineering firm. Their pavement condition survey and report was performed in accordance with FAA guidelines and will serve as the basis of setting up a Pavement Maintenance Management Program as required by the FAA.

Generally, the airport's pavements were in good to fair condition. The report explains the pavement conditions in detail.

Drainage facilities were observed to be in good condition, Ron said.

Nick Pela described the condition of the existing City-owned airport buildings. The TAT Hangar and the terminal building are in fair condition. Later in the Master Plan we will look at the historic significance of these buildings. These buildings will be the "hinge point" around which certain decisions for improvements will be made.

Don McDaniel asked if the historic significance of the buildings will increase the available funding? Nick replied that the consultant team will look at options--50%/50% historic preservation grants and 90%/10% grants from ADOT-Aeronautics Division.

The FAA will not fund a terminal at this airport, but ADOT-Aeronautics might fund a terminal's public spaces on a 90% ADOT/10% City basis.

Nick said the concrete slab in the big hangar is poor. We will look at the alternatives and costs involving these buildings at the next meeting.

Page 1-15 describes the architect's preliminary recommendations and page 1-17 discusses the ADA items which should be addressed with any terminal renovation.

Ron said the electrical vault building (p. 1-18) is the subject of runway lighting design project that Gannett Fleming is working on. We are putting together alternative costs for upgrading the existing vault versus constructing a new vault.

Nick said two service areas were defined for Winslow Municipal – a general aviation service area and an air carrier service area as described on pages 1-19 and 1-20.

A comment was made that the air carrier service area needs to extend farther to the east. Show Low is 60 miles from Winslow; only 30 miles from Holbrook.

Page 1-21 discusses air carrier aircraft. Jim Boles asked if the airport would accommodate 747/707's? It was said that large aircraft could possibly be accommodated if they are "empty". Nick said we can run these scenarios. Jim said we need to look at these possibilities. Gary asked if ATL took cores to determine pavement strength. Ron said "no", just visual conditions. Ron said he understood Gilbertson and W.T.I. were to do it, but didn't.

Nick said no airspace conflicts were found.

Nick said an extensive wind data analysis was performed based on the most current data available. The analysis satisfies FAA and ADOT-Aeronautics requirements. It included all three runway alignments. The single runway analysis indicated Runway 4-22 gets best coverage. The dual runway analysis indicated 4-22 and 17-35 provided the best coverage. Taken together, all three runways would provide 100% coverage.

Regarding Land Use, Nick explained there is only one conflict – the residential area off Runway 22. There is also a residential area off Runway 11. John Roche asked if the consultants will look at the safety aspects of flying over the City. Nick said we will look at FAA standards, namely, the penetrations into the approach surface. Gary asked if we will look at the approach pattern into the airport – right hand, left hand? Nick said yes.

IV. Section II: Aviation Demand and Capacity

A. Activity Forecasts: Nick said there are several existing activity forecasts by the FAA, the State and the existing Master Plan. These help form the basis of existing activity and the forecasts for future activity.

To develop a forecast we try to create a baseline, Nick said. To determine the existing activity without records, it's tough to nail down. We look at activity at similar airports. We also come up with a forecast range and try to be reasonably conservative.

The FAA groups aircraft into Airplane Design Groups – essentially based on the width of aircraft wing span and into Approach Categories – based on approach speed.

Nick reviewed the forecasts given by various documents on page 2-5.

B. Seasonal Use: In doing a forecast we try to also nail down seasonal usage. For Winslow we tried to use fuel sales records, Nick said we came up with a curve; however, the U.S. Forest Service's fuel sales cause a peak in volume that affects the accuracy of the curve.

John asked: do you have any information on airports with 24-hour fueling. We're going into 24-hour fueling. There's only one currently in northern Arizona, John said.

At the bottom of page 2-8, it says the Forest Service operational peak is in July. It should be June, Nick said. We accepted the seasonal use curve for non-towered airports with winter seasons. It fits Winslow Municipal if you take the peak out, Nick said.

We take the annual operations and convert it to an hourly peak using the seasonal use curve. We use this to size facilities. Some facilities have to be customized, for example, the Forest Service, Nick said.

C. Estimated Current Activity: The consultant team took traffic counts on days when we were doing inventories, Nick said. We came up with 12,743 annual operations (page 2-12).

We received records from the Forest Service. These are displayed on page 2-13. The Forest Service within the next 5 years will convert to turbine aircraft.

Gary said the runway can't handle the weight of the E model C130. They will fly these out of Phoenix. This should be looked at in the Master Plan.

Nick said we looked at a second forecast for potential growth (page 2-15). Someone asked if we had any dialogue with air ambulance? Nick said no direct contact yet – we sent questionnaires. The only ones returned thus far were from owners of slurry bombers.

Using the potential activity estimate we came up with a range of future activity – the demand is somewhere within the range, Nick said.

In the back of the section on pages 2-31 and 2-32, Nick said there are estimates for hourly demand. The hourly peak is six operations in 1997 and higher for 2017. We will look at the high end for design, but look at the reasonability of achieving it.

D. Critical Aircraft: Nick said page 2-25 contains a list of the critical aircraft design fleet. For the ultimate term we should plan for faster and wider aircraft. The improvements don't have to be built unless they are needed, but you want to plan for these possibilities. If you have the space, reserve it, Nick said.

There was another statement regarding the need to know the load capacity of the runways.

V. Fuel Facility

The new fuel facility will be in operation by the first of the year. Gary is producing a drawing for the State Fire Marshal in the next couple of weeks. Need to finalize location.

VI. Proposed Schedule

The schedule was reviewed.

VII. Next Meeting

The next meeting will be on December 11, 1997 - 2 PM for the P.A.C. No. 2 and 7 PM for the Public Information Meeting No. 1. (Please be aware that since the meeting, the PAC Meeting has been changed back to December 9 and there is no public meeting scheduled.)

VIII. Change of Airport Name

The City is considering changing the airport's name to "Charles A. Lindbergh" Field. Lindbergh spent some time at the airport, overseeing construction of the TAT Hangar. The City asked the consultants to look into this process.

The City Council will be appointing an Airport Commission. Members will become P.A.C. members.

pc: Attendees
Mr. Bruce Scott, U.S. Forest Service
Mr. Marvin Hatch, Jr., Airport Commission
Mr. Tom O'Connell, Airport Commission
Mr. Allan Affedlt, Airport Commission
Mr. Steven Haydukovich, Airport Commission
Mr. Bob Mansell, Airport Commission

MEETING MINUTES
WINSLOW-LINDBERGH REGIONAL AIRPORT
MASTER PLAN

P.A.C. MEETING NO. 2

Date: December 9, 1997

Attendees:		
	Ron Schreier	Gannett Fleming, Inc.
	Nick Pela	Nicholas J. Pela & Associates
	John Roche	City of Winslow
	Steve Haydukovich	Winslow Airport Commission
	Gary Carlson	City of Winslow
	Allan Affedlt	Winslow Airport Commission
	Robert Mansell	Winslow Airport Commission
	Jim Boles	Mayor, City of Winslow
	Marvin Hatch, Jr.	Winslow Airport Commission
	Kaye Schurkens	City of Winslow
	Ray Boucher	ADOT-Aeronautics
	Tom O'Connell	Winslow Airport Commission
	Tom Schultes	Winslow Mail
	Susy Wetzel	City of Winslow

Minutes Prepared By: Ron Schreier

The meeting discussion followed the agenda attached. The major points of discussion are noted below:

I. Introductions

John Roche introduced Ron Schreier of Gannett Fleming and Nick Pela of Nicholas J. Pela & Associates to the new members of the Committee.

Ron indicated we had one meeting already, but have new members and Ray Boucher from ADOT-Aeronautics is with us, so Ron asked everyone to introduce him(her)self. Ron indicated that he wanted to add two agenda items: Review of Meeting Minutes (Item 3) and the Status of the Electrical Vault (Item 9).

Housekeeping Item: Take Bruce Scott (Forest Service) off Distribution List. John Roche said to provide the extra copy to the City for the Forest Service.

Ron asked who are the voting members of the P.A.C.? John said: Messrs. Affedlt, O'Connell, Mansell, Haydukovich and Hatch.

II. Planning Advisory Committee (PAC) Process

Ron reviewed the PAC process for new members. Ron emphasized that we want and need committee input.

III. Approval of Meeting Minutes (PAC Meeting No. 1)

Meeting minutes were sent out. Ron asked if there were any comments. Ron asked if the meeting minutes could be approved. Mr. Mansell made motion to approve minutes. Minutes were approved. Ron indicated that it would be unfair to ask new members for approval of Sections 1 and 2 if they need more time to review them.

IV. Section 1: Introduction, Background & Inventory

Ron described the revisions to this section, as follows:

- Page 1-5 - Second paragraph - added fire-suppression bomber aircraft.
- Same Section - Fifth paragraph - Runway 11 is equipped with REILS, and we acknowledged Runway 22 has a VASI and REILS.
- The frequency for the Automated Weather was changed.
- Page 1-6 - We deleted a statement saying the restaurant is not in operation.
- Page 1-11, 1-12, 1-13, 1-14 and 1-15, we added inventory items. We provide more detail on the pavement inventory performed by ATL, our geotechnical engineering subconsultant. Most pavements have been rated in good condition. "Fair" condition indicates an upgrade - reconstruction - for example is needed within the 20-year planning period. "Poor" means not suitable for intended use and should be fixed immediately.

  Page 1-15 summarizes the condition of airport facilities.
  Question: I was thinking of the general aviation apron which has sinkholes - has that been solved? Ron said we'll take another look at this apron since the initial assessment said it's in good condition. We may want to change it to "fair" condition, he said.

  Question: The drains in front of the terminal hold water and don't drain. They are not clogged; there is too much water. Ron said this is in the area that we recommend for reconstruction. At the intersection of abandoned 17-35 and Runway 4-22 there is a culvert that doesn't drain. Ron said we can go back to our notes on the culvert to single out the ones that are clogged.

  Question: Will ATL's report be included in the Master Plan? Ron said it's color-coded, but not in a CADD file. Ron is to copy the report in color and provide it as a stand-alone Appendix.

- Page 1-18 - Regarding the restaurant - we added a statement that it has recently be reopened.
- Page 1-23 - The Air Carrier Service Area now includes Holbrook.
- Figure 1-4 was added.

Ray Boucher asked why we left out a discussion of the fuel system? Nick said it was originally left out because it was up in the air and it hasn't made it back in yet. John said it's the City's intent to put the new fuel system near the parallel taxiway (11-29). [John pointing at the layout plan]. He said the project is continuing and should be completed in January. At that time the existing fuel tanks will be taken out of the ground, he said. The Forest Service will still fuel with trucks. The fuel system will be automated for 24-hour service.

V. Section 2: Aviation Demand and Capacity

Ron reviewed the changes to Section 2 on pages 2-8, 2-31, 2-32, 2-33, and 2-34. Ron reminded Committee members that the forecast was done to give a "low range" and a "high range" forecast to provide flexibility. Figure 2-1 was added to Section 2.

There was no discussion on Section 2 changes.

VI. Approve Sections I and II

Sections 1 and 2 were not voted on for approval since new members needed more time to review the information.

VII. Section 3: Historic Preservation

Nick said we knew before we started this project that many of the key decisions would revolve around the status of the existing Terminal Building and Hangar built in 1929. Section 1 includes the history of these facilities. We have to keep in mind that preserving historic properties is a matter of national policy, Nick said. This doesn't mean we have to preserve the buildings, but it does mean there is funding which may be available for preservation. Another factor is that anytime you use public monies to improve the airport, you have to look at potential impacts to the environment and one of the things you look at are impacts to archaeological, cultural and historic elements. To use FAA funds to do anything to the parallel taxiway, which would negatively impact the terminal building or hangar, we have to evaluate it either at this point or through the environmental assessment process, Nick said.

After we go through the historic preservation issues and review the facility requirements, we'll look at developing alternatives to handle this situation, including the parallel taxiway, Nick said.

Nick reviewed the funding available for historic preservation and the requirements to be eligible for funding. The major criteria that need to be met are:

1. Historic Context
2. Historic Integrity

Nick reviewed the many aspects of these criteria that define each one, as they are described on pages 3-2 to 3-6.

John asked do you have any budgets for the costs to restore these buildings back to what they were in 1929? Nick said there's a spreadsheet in Section 5 which indicates the costs to renovate the buildings.

Question: Would it be appropriate to isolate the cost to renovate the terminal building versus the hangar? Nick said there is a separate cost for the hanger - $172,500. What about the terminal building? Nick said we can break that out.

Nick said we have concluded that the two buildings we are studying are fairly unique relics of the U.S. airline industry and would probably be good candidates for both placement on the National Register and also for H.P.F. Funding. If we are to relocate or substantially modify the structures, they would not be eligible for historic funding.

Al Affedlt asked, Do you have the original floor plan of the buildings? Nick said, no, the dimensions we have are as we measured them today. Al said the restrooms are not original parts of the Terminal Building; therefore, making modifications to the building may not affect funding. We need to find the original drawings, perhaps at the local library.

VIII. Section 4: Facility Requirements

Before discussing Section IV, Facility Requirements, Ron reviewed Section II which explains the FAA's Airport Reference Code (ARC). Page 2-3 shows the Design Group is given by Roman numerals and the Approach Category is given by letter designations. They are related to wingspan length and approach speed. Page 2-24 talks about critical aircraft determination. We indicate there is a mix of aircraft using the airport: B-I, B-II, C-I through C-III. In order to accommodate all of the critical aircraft listings, we would need a 10,300-foot long primary runway. We don't need necessarily to accommodate all those aircraft. The table (Page 2-25) indicates what length of runway is needed to accommodate each aircraft type. Those marked with an asterisk are not accommodated by the available 7,500-foot runway. So with that background we can jump into Section IV, Ron said.

Based on the forecast and based on the inventory of the existing facilities, we looked at what you might need in terms of airport improvements over the next 20 years, Ron said. To do this we have to establish some criteria. The facility requirements are based on the acceptance of certain criteria, as follows:

1. FAA dimensional standards will be followed.

2. The critical aircraft will include B-I, B-II, C-I through C-III. The immediate and short-term requirements should be based on C-II aircraft, with consideration for C-III aircraft in the future.
3. The ultimate design aircraft is a C-III turbo-prop or business jet.

John asked to define what a C-III aircraft is? Category C includes aircraft with an approach speed of 121 knots or more, but less than 141 knots, Ron said. Design Group III includes wingspans from 79 feet up to, but not including, 118 feet.

Ron said the last Master Plan states that the pavement strength is 60,000 lbs., single wheel gear, although this is not substantiated. The City indicated Gilbertson Associates was to make a determination of pavement strength. Ron said he spoke with Dave Gilbertson who said he had stopped work on it and it was not done. Ron said he could talk to ATL, our geotechnical subconsultant, about that would be needed to make this determination.

Ron said we scheduled proposed improvements into three terms: immediate, short-term and ultimate-term. The immediate term is the next three years and includes those items which we considered to be in poor condition. The short-term is the five years after that through 2005 and the ultimate term is the remainder - up to 2018.

Ron said although it's not needed now, we may want to plan in the ultimate term for a longer runway with more pavement strength, but for now the runways are adequate. We are not recommending a runway extension at this time. We looked at gaining some additional runway length for 11-29 by relocation. There is 400 feet of potential runway on each end of Runway 11-29 to pick up an additional 800 feet. This would provide a runway length of 8,700 feet, but it would change the displaced threshold.

Question: Could we consider lengthening the other end? Ron said we'd have to look at obstructions and other issues. Nick said we would have to go outside the airport boundary. We were not sure of the extent of the planned industrial park. We used Highway 87 as a controlling feature.

John said some of the land is Hopi Tribal trust land.

Question: Do we need a longer runway? Nick said based on what we've seen, I don't think so. Nick said what we're saying is that a runway length that accommodates all of the C-III aircraft does not seem to be necessary. It could be planned, but doesn't seem to be necessary. The existing runway handles quite a few aircraft in the C-III category already, including some commuter aircraft. What I'd like to see is to program an extension because when you're marketing the airport, you might have an opportunity where you need to show a runway extension, Nick said.

Question: If the Forest Service goes to a different aircraft, would this be adequate for that? Nick said we need to get some information from the Forest Service. Gary said the weight of the Forest Service aircraft may be 130,000 to 150,000 pounds. Nick said we need to look

at specific performance data for that aircraft before we come up with an answer. A previous discussion with the Forest Service did not yield useful information, Nick said. Nick said we can run numbers for what they have now, but it will change in the next 5-10 years.

Ray Boucher said the land use map shows the area near the planned extension is residential. What would be the impact noise-wise of a runway extension, Ray asked? Nick said good question - there will be a noise analysis, but we have not gotten to that point yet.

Ray said there is the possibility of an extension of Runway 4, but I don't know much about it and use. Is it Indian land? John said "No"; it's County land.

Ray said it would be a runway that would be utilized only for landing in the 04 direction and taking off to the south because of the City. John indicated there is a problem with aircraft flying over the City as they approach the airport. John expressed concern with any plan to extend the runway toward the residential area. Ray said what he would do is indicate the three runway ends that have the potential for extension and stipulate the advantages and disadvantages at the time of this study. The City at this time does not appear to have a preference. Nick asked about the Airport Layout Plan? Ray said the extensions wouldn't have to be on the ALP, but indicate an extension for the future. Ron said realistically the Airport Master Plan would be updated in 8 years or so and in that time frame they would have a better idea if they want an extension, and then it can be shown on the ALP.

In regard to the Crosswind Runway, it appears to be needed for the high wind condition and the length is adequate We are recommending keeping the two runway configuration.

Regarding instrument approaches, Ron said the all weather utility of the airport can be improved by installing improvements which would allow lower approach minimums. These methods include an omni-directional approach lighting system, a MALSR, or Medium Intensity Approach Lights with Sequence Flashers. We could institute a Precision Instrument Approach with an ILS, GPS or Transponder Landing System. Currently, an ILS cannot be funded by the FAA; the FAA emphasizes the use of a Global Positioning System. Ray said FAA is pushing the use of GPS systems faster than people can get them in their airplanes. ADOT-Aeronautics is doing a nav-aids study right now. We have about 26 airports where we'll try to put in GPS Precision Approach Systems, Ray said. There are a lot of different factors to look at. It's going to be precision or non-precision GPS approach.

Other recommendations for ultimate term:

- Runway 29 ultimately be equipped with non-precision approach to 3/4-mile visibility.
- Crosswind runway to be served by straight-in instrument approach with greater than 3/4-mile visibility.

Taxiway pavement strength appears to be adequate. The obvious taxiway deficiency is the parallel taxiway with the bend in it, which will be covered in the Alternatives Section. Ultimately, we're looking at widening the taxiways to 50 feet for C-III aircraft. We will have

a standards modification. For C-III aircraft we need 400 feet from centerline of runway to centerline of taxiway. With the widening we will have 340 feet centerline to centerline. We'd still need a waiver from the FAA.

Ron said, regarding airport lighting, there are no immediate needs beyond the Medium Intensity Runway Light system currently under design. In the short term, we program Medium Intensity Taxiway Lights so the City can choose to have these if they want. We're assuming within the 20-year period the VASI's will need to be replaced - we're recommending PAPI's.

Ron said there are some apron pavements which should be reconstructed in the immediate term as indicted on page 4-13. We will also look at the other apron which is of concern to the City - as to where its renovation should be programmed. There does appear to be adequate tiedown space.

On page 4-11 we talk about Terminal Building Requirements. In the immediate term, the existing Terminal Building is adequate for present demand. In the short-term, we have an issue with the Terminal Building being an obstruction to C-III aircraft using the taxiway parallel to 11-29. We will discuss this in the Alternatives Section.

We recommend consideration of a second Terminal Building for a commuter aircraft, if this becomes a reality.

For rotorcraft, we recommend a 48' x 48' Touchdown and Liftoff Area to be designated on a part of the existing apron.

Auto parking is adequate, but we indicate a need for possible expansion in the future on an as-needed basis.

IX. Electrical Vault

Ron provided a handout of cost estimates for the electrical vault. One estimate is for a new vault and one is for renovation of the existing vault. The costs do not include the new equipment which would be placed in either vault. Some of this plays a part in the alternatives since certain alternatives call for the demolition of the existing vault. Ron said there is an operational issue regarding the renovation of the existing vault. To keep the electrical system operating at all times, you'd have to have temporary connections while the vault is being renovated. Equipment would need to be moved to a suitable space and temporarily hooked up. With the new vault, there would be a cleaner switchover. We do not see any historic significance to the vault, Ron said. We will need an answer on this issue fairly soon, but not necessarily today.

Question: Do we know when the existing vault was constructed? *Answer:* 1929.

Ron said if you want a new vault, we will still put the demolition or clean-up of the existing vault in the bid documents as an alternate. John suggested that the Committee discuss this issue at their upcoming meeting on Friday.

X. Section V: Development Alternatives

Nick said the first development alternative was defined to be the least invasive approach and hopefully the cheapest. This alternative minimized the impacts to the present Terminal Building. The alternative is shown in Figure 5-1. The comparative Cost Table indicates a total cost of $706,400 and a $111,900 City share.

Nick reviewed the other alternatives:

- Alternative No. 2 maintains the current taxiway alignment and would require relocation or demolition of the existing Terminal Building.

- Alternative No. 3 involves modification of the existing Terminal Building to provide adequate taxiway Object Free Area clearance for Design Group III aircraft on the present taxiway alignment.

- Alternative No. 4 allows unrestricted use of the parallel taxiway by C-III aircraft, while preserving the Terminal Building in its current location. This alternative involves constructing a new parallel taxiway and purchasing property.

  Statement: There is a flood control dike in the area where the proposed taxiway is shown.

- Alternative No. 5 would realign the existing parallel taxiway by removing the bend and providing a straight route through the terminal area. This option requires relocation of the Terminal Building, restaurant, electrical vault, power pole and auto parking.

  Figure 5-6 shows an alternate terminal building. Nick said if commuter service becomes a reality, the City may want to consider a commuter airline terminal building separate from the general aviation terminal building to maintain separate operations.

  Statement: The City's water yard will be relocated after January 1. (Refer to Fig. 5-6).

  Question: The City owns the U.S. Weather Bureau building. Can it be utilized as a terminal building. *Answer:* Not likely due to its location.

  Nick reviewed the comparative costs of the alternatives indicated on page 5-4.

Al Affedlt said that the maximum grant available from SHPO is $100,000. ISTEA is a possible funding source. The D.O.T. administers this program. The NACOG ranks and

accepts applicants. ISTEA is a much larger source of funds for a transportation-related structure. Al said you may have to do a layering of funds, from ISTEA, Historic Preservation, City, etc.

Nick said there is work we can proceed with - we do not need a decision on the Alternatives today, but there will need to be a decision made. John suggested waiting pending a discussion by Commission members.

Al said, if the Preservation grants came in at the smaller sum, we should increase the ADOT funding for the building. We should show higher ADOT funding since we can only get $100,000 for Historic Preservation. What might be better for the City is to get less money for the preservation grant, if all the money can come from ADOT since the City would pay less in matching money.

(Ray Boucher left to make a phone call to ADOT-Aeronautics regarding funding availability).

XI. New Fuel Facility

Bob Mansell expressed concern about the location of the new fuel facility - is it in the way of any of the proposed alternatives? Nick and John explained how this was taken into consideration. No matter what design is chosen the tanks will not be affected, Bob asked. John and Nick said that is correct. Bob expressed concern about the potential conflict between parked aircraft and aircraft using the taxiway. I can't visualize that much space there, he said. John explained the layout further.

Nick said when developing the alternatives, we assumed the City would site the fuel facility based on the standard offset dimensions we provided. John said they are using the dimensions provided by Nick.

There was further discussion on the logistics of the fueling area. Concern was expressed that the fueling aircraft would be in the Taxiway Object Free Area. Nick requested a layout plan for the fuel facility to check it. John said Gary has the plan. Ron and Nick said they would go to the airport after the meeting to check on the layout.

XII. Change in Airport Name

Ron said he distributed all of the correspondence received to date on the issue of the airport name change. Ron explained the final documents will reflect the new name.

John said the City Council has authorized the name change to Winslow-Lindbergh Regional Airport. I sent a letter to FAA and we are advertising the name change for public comment, John said.

Ray Boucher returned to discuss funding availability as follows:

- Removal or replacement of the electrical vault could be eligible for funding.
- If the terminal building is to be removed, relocated or improved, it could be eligible. And there would be a caveat - you're looking at only the public spaces.
- The hangar is not eligible.

Ron said ADOT would likely match an FAA grant for the vault. Ron is to check on eligibility of vault with FAA.

XIII. Schedule

Ron said he wants to talk about two things:

- Next meeting with this group.
- Public Meetings.

Ron said he believes a minimum of two public meetings are required by ADOT in accordance with the grant assurances. He said we are getting behind on the public meetings; originally 3 were proposed. At the next PAC meeting scheduled for February 17, Ron suggested having a public meeting on the same day.

John said he'd like to wait until the Committee meets again before deciding. Ray said he thinks the PAC meetings suffice for public meeting requirements. Ron said, for now we'll use the dates listed in the schedule as target dates.

The meeting was adjourned. Ron, Nick, Gary and John met at the airport to review the fuel facility location. Nick explained how the fuel pumps need to be outside the Taxiway Object Free Area and how the pull-out apron for fueling also needs to be out of the OFA.

pc: Attendees

Gannett Fleming

WINSLOW MUNICIPAL AIRPORT
MASTER PLAN
PLANNING ADVISORY COMMITTEE (PAC) MEETING NO. 2
Gannett Fleming Job No. 31814

AGENDA
DECEMBER 9, 1997

1. Introductions
2. Review of PAC Process (For New Members)
3. Discuss Revisions To Section 1: Introduction, Background & Inventory
4. Discuss Revisions to Section 2: Aviation Demand and Capacity
5. Approve Sections 1 and 2
6. Discuss Section 3: Historic Preservation
7. Discuss Section 4: Airport Facility Requirements
8. Discuss Section 5: Development Alternatives
9. Select Alternative?
10. New Fuel Facility Location
11. Change in Airport Name
12. Schedule
    - A. Next PAC Meeting
    - B. Public Meetings

Gannett Fleming
ENGINEERS AND PLANNERS

MEMO

To: Distribution List (See Attached)
From: Ron Schreier
Subject: **Planning Advisory Committee Meeting No. 3**
Date: January 9, 1998

The third meeting of the Planning Advisory Committee for the Airport Master Plan will be held on Tuesday January 20 at 4:00 PM at the Airport.

Please find attached the following information:

1. Distribution List
2. Meeting Agenda
3. Revisions and Additions dated December 30, which includes a section identifying potential niche markets and also a new cover for the workbook.
4. Revisions and Additions dated December 22.

The meeting minutes from Meeting No. 2 will be mailed separately. The schedule will not be redistributed until the schedule is discussed at Meeting No. 3.

Please read through the information. This will be the most important meeting to date. We hope from this meeting the Committee will reach a decision on which alternative to select.

Thank you.

3001 E. Camelback Road Suite 130, Phoenix, AZ 85016-4498
Office: (602) 553-8817 Fax: (602) 553-8816

MEETING MINUTES
WINSLOW-LINDBERGH REGIONAL AIRPORT
MASTER PLAN

P.A.C. MEETING NO. 3

Date: January 20, 1998

Attendees:	Ron Schreier	Gannett Fleming, Inc.
	Nick Pela	Nicholas J. Pela & Associates
	John Roche	City of Winslow
	Steve Haydukovich	Winslow Airport Commission
	Gary Carlson	City of Winslow
	Don E. McDaniel	City of Winslow
	Allan Affedlt	Winslow Airport Commission
	Robert Mansell	Winslow Airport Commission
	Harold D. Soehner	City of Winslow, Councilman
	Tom O'Connell	Winslow Airport Commission
	Tom Schultes	Winslow Mail
	Susy Wetzel	City of Winslow
	Steve Koch	U.S.D.A. Forest Service
	Shane Preston	Self

Minutes Prepared By: Ron Schreier

The meeting discussion followed the agenda attached. The major points of discussion are noted below:

I. Meeting Minutes - Approve

Meeting minutes for P.A.C. Meeting No. 2 were distributed at this meeting by Ron Schreier; therefore, review and approval of meeting minutes were postponed to the next meeting.

II. Section I: Review Revisions and Approve

Ron Schreier said the instructions dated 12/30/97 which said to discard Table of Contents pages iv-vi were in error. Pages v and vi should have been retained. Let Ron know if you need replacement pages.

Ron Schreier proceeded to explain the changes to Section 1:

- Page 1-13 - South General Aviation Apron condition rating changes to Fair and evidence of subgrade feature was noted.

- Page 1-14 - Under Airport Drainage, added that some catch basins don't appear to drain properly.
- Page 1-15 added a section on Fuel Delivery and Storage.
- Page 1-16 added fuel storage delivery and storage to the Summary Table.
- Figure 1-4 - South G.A. Apron is now indicated to be in "Fair" condition.

Ron also noted that the ADOT five-year program that we put together for the City of Winslow included repair of this apron.

These were the changes to Section 1.

Figure 1-4 was noted to be missing from two workbooks.

Comment: John Roche asked if we could use a numerical ratings for the pavements (similar to rating a highway)rather than "good" and "fair".

Ron explained the system of good, fair and poor, where "poor" pavement should be repaired within the Immediate Term, the first three years of the planning period.

John said we should be more specific under the good/fair system as to what needs to be done. Whether it needs subgrade repair, pavement replacement, chip seal, slurry seal, it will be a lot easier for us to follow.

Nick Pela said this information is found in a separate document, the report by ATL. Nick said each pavement is given a numerical rating in that report.

Ron said the ATL report does rate the pavements based on a relative scale determined by FAA, but what it does not do that John is suggesting, is something that we normally do within the development of the 20-year program, is a program for treating the pavements. Ron said this program is part of the development program and will be in there with the costs.

John said "okay".

Ron also said everyone received all new pages since we changed the name of the airport on all documents.

It was decided to approve all sections at one time rather that individually.

III. Section 2: Review Revisions (dated 12/22/97)

Ron said there were no changes in Section II, except the addition of a section on Niche Markets which he wants to discuss later (Agenda Item No. 6).

IV. Section 3: Review Revisions and Approve

In Section III Ron said we added quite a bit of information partly due to the comments from the last meeting. Changes were as follows:

- Page 3-8: Added a statement regarding Arizona's annual allocation from the federal HPF. Also the section on the Arizona Heritage Fund is new.
- Page 3-9: The ISTEA section is new.
- Page 3-12: Certain statements in the conclusions were added or revised.
- Page 3-13: A reference to new Figure 3-3 was added.

  The photographs were re-formatted to fit one to a page.

  Figure 3-3 illustrates the nomination process for the National Register of Historic Places.

V. Section 4: Review Revisions and Approve

- Page 4-2: A statement has been added which states: "Recommendations for action in the Immediate Term (1998-2000) are included when a deficiency has been defined which requires immediate correction for reasons of safety, or when a feature was found to be not able to fulfill its design function at the present levels of demand".

Under the Primary Runway Requirements we now state:

> "The displaced threshold is useable for takeoffs, but not for landing operations, on Runway 29. It is considered as useable pavement for both takeoff and landing operations on Runway 11."
>
> "The clearway/stopway is available only for use for takeoff or landing on Runway 29. It is not considered as useable pavement for either takeoff or landing operations on Runway 11."
>
> "According to FAA Advisory Circular AC 150/5300-13 Airport Design, a runway's "Declared Distances" are the distances that the airport owner declares available for an aircraft's takeoff and landing operations."

On the following page, the table shows the existing declared distances for Runway 11-29, Ron said.

- Page 4-4: At the bottom there are new statements about runway (11-29) extension.

"Runway 11-29 could be extended approximately 2,100' to the northwest if portions of Industrial Park Road and the existing flood control levee were relocated, and with acquisition of some additional land. The location of Highway 87, two school buildings, and existing residential uses to the southeast will not permit extension to the southeast. In fact, if the Runway 11 instrument approach is upgraded to a "precision" approach, the Runway 29 threshold would require relocation 500 feet to the northwest in order to keep the Head Start school outside of the required Runway Protection Zone."

And the Figure 4-1 and 4-2 at the end of this section illustrate this situation, Ron said. The statement continues with the statement: "With the 2,100 foot extension and the 500-foot threshold relocation, and with retaining the 900-foot of existing pavement at the southeast runway end as a clearway, total Runway 11-29 pavement length would be 9,650 feet".

Comment: Do we have any idea about looking into extending the runway on the other end?

Ron: On the crosswind runway?

Comment: On all of the runways that we are thinking about extending?

Nick Pela said in the last draft of this section we looked at extending at both ends before we got all the information as to what was actually out there. We found there is too much–a residential area, a couple of schools, a Head Start school, so we started looking...

Comment: Well, I was thinking about the other end.

Nick: That's where this one is – the northwest end.

Comment: What about 4-22?

Nick: We started looking at that and because of the approach over the residential area to the North, over the tracks and over Town, we didn't see any driving force to turn that into the Primary Runway. Right now, 4-22 is the Crosswind and the length is adequate. On the South end there is an existing residential area.

Nick: We haven't looked at the traffic patterns from the larger aircraft, if we have time today I'd like to talk about that. Would like to get a city map which shows more detail of what the existing conditions are for the approach areas.

Nick (referring to exhibit): Here we have a drawing with digitized topography which we'll use for the Airspace drawing. The hatched areas are higher density residential and schools are shown. We'll need to talk about what you want to do: do you want to try to keep them off 22 altogether, or do you want to come up with some pattern

where they start at a higher elevation and then drop drown at a steeper angle, or try to have them come up the Highway and come in.

Ron said: There's an error on Page 4-11 at the top. Pavement condition is "Fair", not "Good".

- Page 4-13: References to funding available were added.
- Page 4-19: The land acquisition section was rewritten and extended in the second paragraph.
- Page 4-20: The rehabilitation of the South General Aviation Apron pavement was added to the short-term program.

Figures 4-1 and 4-2 were added to the back of the section.

Al Affedlt: The land acquisition area - is that City property?

John Roche: You won't have to acquire it, it's City property.

Al: Is it tribal?

John: Where are you talking about?

Al: The Southwest.

John: Southwest is Hopi Trust Land.

Al: Can you acquire Trust Land?

Comment: I suppose you could if they want to sell.

John: I think part of that is Trust and the other part is Owned in Fee, on that Southwest.

Comment: So where does that leave you if you have to acquire it?

John: Which area are you talking about?

Comment: We're talking about the end of Runway 29.

Nick: That's the fee acquisition. The approach to Runway 4 is the Indian land.

John: The fee acquisition is County land. Where Al was talking about is part Trust, part Fee.

Nick: The fee acquisition would have to be purchased. The easement would be an aviation easement for approach slope.

Ron: Is there a property map that actually shows the boundary.

John: I don't know, we can check.

Comment: I don't know if any of that is trust land.

John: I thought they told us some of that was Trust.

Comment: I always thought the Hopi Trust Land was further to the West.

Comment: There is Trust Land to the West.

John: We can check. Nick, if you give me the areas you want ownership information on, I can get it for you.

Comment: Does the proposed runway extension go across the roadway and involve roadway realignment?

Nick: The end of the runway would be extended all the way out where the roadway is so there is realignment of the roadway to all the way back here (pointing). This is only if you want a Precision Approach with a 50 to1 glideslope. Otherwise, the roadway comes in closer.

Comment: Is the GPS Precision going to change...

Nick: Right now, we're looking...the FAA is calling the criteria the same right now - it is either a Precision Approach or it's not. It doesn't depend on whether it's GPS, ILS or TLS.

Ron: Anything else on Sections 4, 3, 2 or 1?

What we can do now is talk about the Niche Markets.

VI. Discuss Section 2: Niche Markets

Nick: At the end of Section 2, starting on page 2-36, we added some potential Niche Markets.

For any of these you will need to provide some infrastructure improvements. The key sentence is "The focus of the City should be to provide an adequate airport facility to serve any of these markets, and then to provide an aggressive marketing effort to attract new business to provide the suggested services".

Most of the suggested services are private enterprise, but the City might provide some sort of financial, tax or other incentive. These are not exclusive uses, they can all fit together, Nick said.

Nick then reviewed the potential Niches, their elements and their requirements (from pages 2-36 to 2-38), including the following:

- Regional Business Aviation Center
- Winslow Airport Industrial Park
- Auxiliary General Aviation/Military Training Facility.
- Historic Site and Northern Arizona Sport Aviation Center

Nick: The second to the last paragraph sums up what I said earlier that these specific niche markets might be considered unique parts of an aggregate market base for the airport. Each one will have its own improvement needs, but there's enough overlap to encourage a broad-based marketing effort. Certainly this is not the end of the list - other things can be added.

Comment (John Roche): How about the feasibility of some type of repair facility for aircraft?

Nick: You certainly have the area to do it. Are you talking about some type of airline designated repair facility or for the re-building of an aircraft for sale.

John: We've had interest in building the ultralight aircraft here and putting kits together for people.

Nick: First of all, an ultralight is not a pure aircraft. We see that as an aviation industrial function. The large-scale repair facility would be more of a niche market because there would be some specific infrastructure improvements.

John: The other idea is the sale of property next to the taxiway for the sale of houses - like an airport residential park.

Nick: You can do that, but every penny of that would be at your cost, or a private developer's. You can't use FAA or ADOT funds.

Comment: That doesn't knock you out of the market for runway funds?

Nick: As long as you are not talking currently improved airport land and putting it in private control.

John: The other idea we had along the taxiway, is to sell land for T-hangars.

Nick: Selling it or leasing?

John: Selling or leasing. Similar to what Mr. Mansell has.

Nick: In the Facility Requirements Section we had given an idea of what land you need to set aside for future hangar development. What I have seen most successfully done is if you retain ownership of the land and lease it.

Ron: How much interest is there in hangar space?

Gary Carlson: I've been getting a lot of calls lately. People from other than Winslow.

Comment: Can we do a cost-benefit analysis on that - what it costs to put up a hangar and then what we'd charge.

Gary: The last time I checked, it runs about $125 a month to cover our costs for a T-hangar.

Comment: Can we justify the cost of hangar development?

John: We haven't really looked at it in detail.

Ron: We'll be looking at some of that in the financial end.

Comment: With the more airplanes you get in here, the more chance there is that someone is going to want more than repair as well. More of a possibility that someone will want to set up shop. ...This is an opinion about building houses alongside the taxiway. Depending on the direction and focus that you'd like to take for the airport, what should be (narrower) very much so in my opinion, if you put additional houses. The airports that I've seen that had houses, usually weren't very accommodating to any industrial park. People don't want to have smokestacks sitting in their backyard. This is just something to consider depending on the focus you want to take.

John: These are conceptual.

Comment: Should we locate the hangar space?

John: We have a map which shows a location for T-hangars. Is that the consensus?

Comment: If people want hangar space, they're going to go somewhere, here or Show Low.

Comment: They are paying $500-600 a month for hangar space in L.A.

Comment: I can think of a couple of people who went to Holbrook to get hangar space.

Al Affedlt: Do we get a name and address for those who call about hangar space? Can we keep some sort of record? It makes it easier to develop if we can go to the bank saying we have so many people waiting for hangar space.

Ron: How is La Posada doing?

Al: We're doing fine, we're open and in the second phase.

Ron: Is that going to be tied into a rail connection?

Al: Yes, we're talking to American Express and Amtrak about some marketing.

(Miscellaneous discussion).

Comment: What is the procedure an airport goes through to establish a Precision Approach?

Nick: You'd have to let the FAA know that you want it. They are going to do their own studies to see if the Airspace would support it. They're also going to see if the number of operations will justify it. Right now there is no way, but if you had a training facility, the FAA might get behind that and put one in. Otherwise, if it was a big enough training facility, a training company would possibly put the equipment in. I've seen that done before. I believe Casa Grande's facility was put in that way.

Comment: I can vouch for Casa Grande. If we have something like this it is easier to train pilots because you have access. If you don't have it, those people aren't going to be here. If you don't have the accessibility with approaches, the equipment, the facilities, the weather capabilities, they're not going to come. Granted it's hard to install everything.

Comment: Are the current facilities adequate to do any type of training programs here?

Nick: In terms of the airside, yes they are. In terms of buildings, I think you'd have to provide a classroom environment. I don't know what the conditions are at the existing vacant Weather Service building.

Comment: Do you think all we want to do is get our numbers up as quickly as we can too show there's a demand.

Comment: We're going to have to work at. The instructors we've had before were more interested in flying Part 135 than they were instructing.

Nick: There's a big difference between someone just doing instruction and a flight school. There are lots of instructors who are only instructing so they can build their time up to get an airline job. A flight school is an actual education environment with instructors who train pilots.

Comment: Are there flight schools in the State we can contact and say we have facilities?

Nick: We can come up with something.

VII. Discuss Section 5: Alternatives

Nick: These were alternatives regarding what to do with your terminal building, T.A.T. hangar and restaurant. Nick reviewed the alternatives using the figures.

Alternate 1 (Figure 5-1): This is the least invasive. Leave in taxiway, build new connector taxiway, add signage. As it is now, this taxiway is in compliance with Aircraft Reference Code B-II which we believe the last Master Plan based its facilities on. It is in compliance with the centerline of taxiway to the building, but not necessarily the centerline of taxiway to centerline of runway. We assume this is under an FAA waiver, but we haven't seen the waiver.

Comment: On Alternative No. 1, does that eliminate the possibility of having a Precision Approach on Runway 11-29?

Nick: No, it doesn't eliminate it. The FAA will look at any obstructions to the airspace or any potential penetrations. They may restrict the visibility minimums or the descent minimums, or both, on any approach. But you still have the approach.

The fact that the centerline of taxiway to runway is less than 400 feet may affect a future I.L.S. approach. I don't think it will exclude the Precision Approach, especially since it's so far down the runway - you're talking about over a mile.

Nick: Alternate 2 is the bulldozer approach, take out the existing Terminal Area. We assume you're going to build another Terminal Building. We gave you two alternate places.

Comment: What implications does moving the Terminal Building, relocating it, have for historic preservation?

Nick: It wouldn't affect the hangar at all. If you try to rebuild the Terminal Building you won't get historic preservation. And our architect and structural engineer said don't try to move it.

Nick: Alternate 3 involves cutting off the Terminal Building at the Object Free Area boundary. It's questionable as to whether you'd get historic preservation money. That doesn't mean you can't still preserve some of it.

Ron: ADOT-Aeronautics would probably fund the public spaces on a 90%/10% basis. The lobby would be eligible, the optional restrooms are eligible. The restaurant would not. The manager's office would not. A pilot ready room would be eligible.

Nick: We have updated the estimates to reflect public vs. non-public spaces.

Nick: Alternate 4 is the most expensive and involves taking out part of the parallel taxiway and building a new parallel taxiway where the existing levee is. This is probably the least desirable, but it is an option.

Nick: Alternate 5 involves straightening out the taxiway. To do this you are taking out not only the terminal building, but the restaurant too.

Again, if we're looking for an ideal situation, we start with a blank sheet of paper and say let's wipe out everything and plan everything exactly where it should be; we'd be looking at something like this (Alternate 5). I don't see this as a very viable option.

Our recommendation on the last page of Section 5 is to go with the least invasive approach - to keep the bend in the taxiway, but to restrict its use.

John: Why would you in that option, since you have a crossover down the way, need another crossover. Why can't you just close that one and keep the existing crossover.

Nick: You could do that. The only difference is you would have a longer time to taxi on the runway.

John: If you're real busy that's (the new cross taxiway) a real good option. But right now, it's (not building the new cross taxiway) probably not a bad option.

Nick: But we should show it on the plan...

Nick: So that's where we are with alternates...

Comment: Any thought of how we can separate general aviation from the Forest Service during fire season? The times they have their two planes parked out here it's kind of hectic and probably unsafe.

Nick: There is a portion of the terminal area that is actually leased to the Forest Service.

(A discussion of the lease boundary ensued.)

Nick: Actually you could restrict the Forest Service operation out of the area we're sitting in right now.

Comment: More than that, I'm thinking of the comings and goings of the traffic when they're working on fires and the mixing of that aircraft with general aviation aircraft. It would be nice if there's some way we can separate that.

Comment: When the Forest Service first came out, they said we'll go over here. At that time back in the 80's, they said don't do that, we're going to move our operation over there. All during that time, we still are sitting here where general aviation is still in the way of the Forest Service operation when they get out.

Comment: Sometimes they park their aircraft on the South Apron for a few days.

Comment: Since the Forest Service has centered its operation around the new concrete apron, it would be nice if we can plan to put general aviation or any other operation - to put some distance between the two.

Nick: From an operational standpoint I don't think we could have done that. We can do some things in the terminal area planning phase - we'll be looking at that next meeting. We can do some actual typical separations.

Comment: There are two issues here - on ground and in the air.

Nick: In the air all you can do is postpone the Forest Service's flying. On the ground we can do something to separate.

Comment: I think the ground is much more congested and probably a greater risk area than the air.

Nick: I guess the focus of the Terminal Planning effort will be to try to maintain the Forest Service where they are and to separate general aviation taxiing operations.

Comment: That would solve my concerns.

Comment: Is there a possibility with this of putting a GA ramp on this side because you'd still have access to the terminal facilities?

Nick: It is possible to do that.

Ron: That might make some sense since the fuel tanks are there. I think one problem with that will be obtaining funding. You've got a big asphalt apron that hardly anyone is using. They also helped pay for the Concrete Apron. They may be hard-pressed to do anything too big. Maybe something small they could do.

John: This is long-range planning.

Ron: That's true.

Nick: We also have some more room when the Water Department relocates.

Ron: When the Forest Service is in operation, is there a single taxiing pattern that they follow?

Comment: Typically, they run to Runway 22. Almost always 22; sometimes in the morning it may be 29 or 04.

Nick: We're going to do a noise analysis and the noisiest culprits are the tankers. If they're using 22, they're coming over Town. If the winds favor 22, they should use it. We should

probably restrict that, come up with a velocity and this would be... If the Forest Service could give us some input as to what the crosswind...

Comment: It's only about 10 or 12 knots. I'm not sure.

Comment: They are coming in light. 29 would be a viable alternative on the landing. You still have some residential, not as much.

Nick: The tradeoff on 22 is you're going to get a lot of noise over this area here (pointing).

(General discussion)

Nick: With a VASI you can set an approach end and say you have to fly the VASI.

(General discussion)

Nick: When we do the noise analysis we have to actually model the approach path for the various aircraft based on the forecast. We can actually dictate what the patterns can be and thus, of course, sort of control noise over town.

Nick: We got off the track on the Alternates. We're asking now if one can be selected.

Comment: Eliminate Alternate 4 - the new parallel taxiway. Does the rest of the Commission feel that way?

Comment: Yes

Comment: Then we're looking at Alternates 1, 2, 3 or 5.

A discussion of the alternates ensured. A motion was made and seconded to adopt Alternate 1 as an interim plan and Alternate 5 as the ultimate plan. The motion was approved unanimously.

IX. Electrical Vault Location

Ron described the proposed vault location next to the existing vault, but out of the object area.

Comment: Are we talking about demolishing the existing vault?

Ron: We can have it demolished or have it cleared out.

Group: Demolish it; it's a traffic problem.

Comment: Are there hazardous issues with it?

Ron: Yes, we'll take care of it.

Tom O'Connell: I'd rather see it south of the beacon. If this restaurant goes like we think, we're going to need a parking lot. That would be a good one.

Ron: But our location is closer to the existing power source.

Gary: It would cost quite a bit to move it that far.

(Some discussion on conduit logistics, etc.)

John: I think Tom has a good idea.

Ron: I was concerned about the parking too, it's a good idea.

A motion was made and seconded to move the vault to south of the beacon tower. The motion passed unanimously.

X. Fuel Facility Location

Nick discussed the measurements we made of the fuel facility under construction. He said we'll look at this on the Terminal Area layout in more detail and make some suggestions.

XI. Schedule

The next meeting is scheduled for March 17.

One more copy of the workbook is needed for the Forest Service. Ron is to assign two copies (total) to John Roche on the distribution list.

pc: Attendees
Non-attending Workbook Holders

AGENDA
WINSLOW AIRPORT COMMISSION
REGULAR MEETING
JANUARY 20, 1998
4:00 P.M.
WINSLOW-LINDBERGH REGIONAL AIRPORT

1. Pledge of Allegiance
2. Roll Call - Excuse Absent Members
3. Approval of Minutes - Regular Meeting - December 12, 1997
4. Commission Consideration and Action
    a) Review Master Plan with Gannett Fleming
    b) Tour of Airport Facilities/Fuel Farm
    c) Review Ground Station Site Lease
    d) Discussion of ADOT Aeronautics Division Study of Rural Air Service in Arizona
5. Commissioners Comments
6. Unscheduled Appearances
7. Adjournment

Gannett Fleming

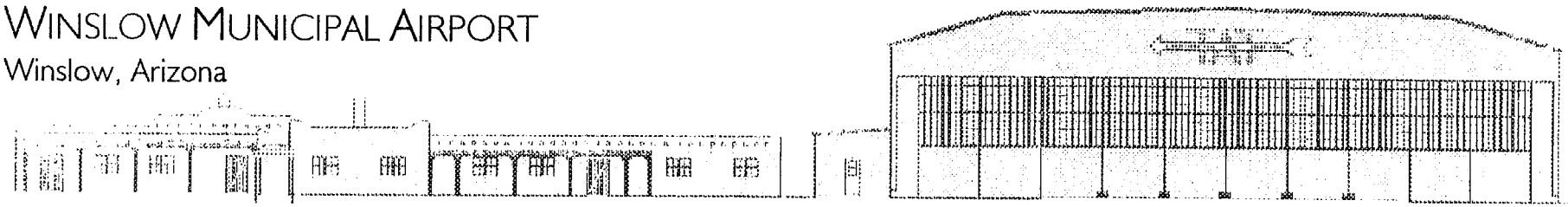
WINSLOW-LINDBERGH REGIONAL AIRPORT
MASTER PLAN
PLANNING ADVISORY COMMITTEE (PAC) MEETING NO. 3
Gannett Fleming Job No. 31814

AGENDA
January 20, 1998

1. Meeting Minutes - Approve
   - A. P.A.C. Meeting No. 1
   - B. P.A.C. Meeting No. 2
2. Section 1: Review Revisions and Approve
3. Section 2: Review Revisions (dated 12/22/97)
4. Section 3: Review Revisions and Approve
5. Section 4: Review Revisions and Approve
6. Discuss Section 2: Niche Markets (dated 12/30/97)
7. Discuss Section 5: Alternatives
8. Select Alternative
9. Approve Section 2 and 5
10. Approve Electrical Vault Location
11. Fuel Facility Location
12. Schedule
    - A. Next PAC Meeting
    - B. Public Meetings

WINSLOW MUNICIPAL AIRPORT

Winslow, Arizona



PAC Meeting Number ....3.... Sign-in Sheet

Date: ....1/20/98....

NAME	REPRESENTING	PHONE	FAX	E-MAIL
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GARY CARLSON	CITY OF WINSLOW	520 289-2429	520 289-9249	
Tom Schultes	Winslow Mail	289 2467	289 4151	
Steve Koch	USDA Forest Service	289 2472	289 2535	
DON E. McENIEL	CITY OF WINSLOW	289-2422	289-3742	
SHANE PRESTON	self	289-2795		
Tom O'Connell	Airport Commision	289-4787		
STEVE HAYDUKOVICH	AIRPORT COMMISSION	289-2422	289-3742	
Allen A. Scott	"	-4166	-3872	typo in design
Robert MANSELL	"	289-5075		
Harold A Jackson	City of Winslow / Council	289-3424	-	-
Suzy Wetzel	City of Winslow	289-3411	289-3742	

Project updates are published on the Internet at http://members.aol.com/njpela/inw.htm

Gannett Fleming
ENGINEERS AND PLANNERS

MEMO

To: Distribution List (See Attached)
From: Ron Schreier
Subject: **Planning Advisory Committee Meeting No. 4**
Date: March 10, 1998

The fourth meeting of the Planning Advisory Committee for the Airport Master Plan will be held on Tuesday March 17 at 4:00 PM at the Airport.

Please find attached the following information:

1. Distribution List
2. Meeting Agenda
3. Project Schedule
4. Instructions for the Revisions and Additions dated March 10, 1998
5. Workbook Revisions and Additions
6. 24"x36" Airport Layout Drawings

Please note that Section 7: Financial Analysis is in draft form and has expenditures and expenses which are deliberately not balanced. More input is needed from the City and the Committee prior to completing this section. Also note that you have been given 24"x36" Airport Layout Drawings to facilitate review. These will be replaced in the final workbook with 11"x17" reductions.

Thank you.

3001 E. Camelback Road Suite 130, Phoenix, AZ 85016-4498
Office: (602) 553-8817 Fax: (602) 553-8816

MEETING MINUTES
WINSLOW-LINDBERGH REGIONAL AIRPORT
MASTER PLAN

P.A.C. MEETING NO. 4

Date: March 17, 1998

Attendees:		
	Ron Schreier	Gannett Fleming, Inc.
	Nick Pela	Nicholas J. Pela & Associates
	John Roche	City of Winslow
	Gary Carlson	City of Winslow
	Don E. McDaniel	City of Winslow
	Allan Affedlt	Winslow Airport Commission
	Robert Mansell	Winslow Airport Commission
	Harold D. Soehner	City of Winslow, Councilman
	Tom O'Connell	Winslow Airport Commission
	Tom Schultes	Winslow Mail
	Suzy Wetzel	City of Winslow
	Marvin Hatch	Winslow Airport Commission

Minutes Prepared By: Ron Schreier

The meeting discussion followed the agenda attached. The major points of discussion are noted below:

1. Meeting Minutes

Ron asked for approval of the minutes to PAC Meetings No. 2 and No. 3. The minutes were approved unanimously.

2. Section 1-5: Review Revisions and Approve

Nick noted the changes to the working papers, as follows:

- Updated Table of Contents.
- Sections 1, 2, 3, 4, and 5 - Section approval dates were added on first pages, although Sections were not approved. (Nick thought they were approved; Ron did not believe they were voted on).
- Page 2-28: typo correction - Added to Saberliner, indicating it could not be accommodated by Winslow Airport's runway length.
- Page 3-12: "Conclusions" changed to "Consultant's Recommendations".
- Page 3-13: Added a brief paragraph entitled "Planning Advisory Committee Actions".
- Page 4-2: and several following pages - Every runway length was checked including displaced thresholds, since the previous draft was based on the previous Airport

Layout Plan and scaled lengths. Since then, our survey data has been processed and slight changes were made based on the survey data.

- Page 4-8: Immediate Requirements Section - added "GPS Navigation" reference. Other change was moving the MALSR system recommendation from the ultimate term to the short term so it agrees with the runway extension. Also corrected visibility statement in the ultimate term.
- Page 4-9: Added a reference to the additional exit taxiway in the immediate term to take care of the alternate the committee selected.
- Page 4-9: Under ultimate requirement the reference to 35-foot wide existing taxiways will be changed to 40 feet since the field survey indicated the taxiways are 40 feet wide, not 35 feet as indicated on the previous Airport Layout Plan.
- Page 4-11: References to the condition of the South General Aviation Apron were changed from "good" to "fair".
- Page 4-13: Added paragraph under Immediate Requirements to note the PAC's desired separation of Forest Service operations from light aircraft operations.
- Page 4-19: Revised areas under the Land Acquisitions section.
- Page 4-20, 4-21, 4-22: Updated the tables.
- Following page 4-22, there are eight pages of FAA printouts for design criteria requirements for both runways under existing and ultimate conditions.
- Figure 4-2: Updated so land acquisitions reflect current ownership and reduced amount of land acquisitions by changing fee acquisitions to easements in some cases.

  Question: What is an avigation easement? Nick said, it is basically an overflight easement where there is an approach surface with a specific slope that gives you the right to clear land of trees and to control the area.

  Question: There was a question about the process for acquisition of easements. John said that once the Master Plan is adopted that would be something the City would continue to look at.

- Page 5-12: A section on "Planning Advisory Committee Actions: Selected Alternate" was added to document the alternate that was selected which became the basis of the next section.
- Section 6-8 are new sections which will be discussed later.
- Appendix B: Added PAC Meeting No. 3 minutes.
- Appendix D: Added for miscellaneous correspondence.
- Airport Layout Plan set was provided for review.

When Nick concluded the list of revisions, Ron asked if there are any further comments on Sections 1-5. If there were no comments, Ron requested that there be a vote to approve these sections. The sections were approved unanimously.

3. Review Section 6 - Environmental Factors

Ron said he would review the highlights of this section and correct an error he made in the text.

Under the National Environmental Policy Act (NEPA) we are required to look at new airport construction in terms of environmental impact, Ron said. There are three categories of federal actions:

(1) the project may have a categorical exclusion;
(2) a project which normally requires an Environmental Assessment;
(3) a project which normally requires an Environmental Impact Statement.

Ron said there is a list in the Master Plan on page 6-2 that indicates what actions normally would be categorically excluded. On the same page is a list of actions that normally require an Environmental Assessment.

For the improvements proposed in this Master Plan, Ron said there are four potential projects that normally would require an environmental assessment. They are:

1. An extension of Runway 11-29
2. The land acquisition associated with the extension, or any land acquisition
3. The approach lighting system, the MALSR
4. Any action related to the demolition of the terminal building, such as the straightening of the taxiway.

What we have summarized in page 6-15 are those projects, Ron said. I make a statement in there, he said, that if these projects do occur in the future and are scheduled at about the same time, one Environmental Assessment could be done for all of the projects. This is something to consider in the future if these projects go forward.

Ron said there are a number of categories of environmental impacts discussed in the FAA Order that we look at in an EA and in the Master Plan environmental overview. These items are listed on page 6-3. We attempt in our environmental overview to examine each of these items, Ron said, but this is not an environmental assessment. This overview identifies potential problem areas so that if someone were to do an environmental assessment that they have an idea of what some of the issues are.

We sent out 15-16 letters to various agencies listed on page 6-4. To date we have received seven letters back. Five letters are in the text. Two letters arrived after the working papers were distributed. These two and any others received later will be in the final document.

Ron generally reviewed the contents of the letters/exhibits. The fifth exhibit from the Arizona Department of Water Resources is the one that corrected a false statement that I made that the airport property is not in a floodplain, Ron said. Ron said that since there is a flood protection levee I assumed the property was not in a floodplain. The mis-statement will be corrected.

Probably the most important part of the Environmental Assessment is the Noise Analysis and the Land Use Section, Ron said. Ron referred the group to Figure 6-1 which shows existing 1998 conditions. The model, the FAA Integrated Noise Model, considers as inputs the

number of operations, types of aircraft, mix of aircraft, landing and takeoff patterns, and percentage of night flights. The only impact that we see in 1998 is to the planned residential area to the southwest. An Ldn noise contour of 65 is considered an incompatible use in a residential area. This is the only residential area that is impacted. All of the other 65 and 75 Ldn contours are within the airport.

In the year 2018, the projected 65 Ldn noise contour stretches further southwest past the planned residential area. Also the 65 Ldn contour goes southeast into an existing residential area and to the northeast about 1/4 mile into the City. These indicate incompatible use.

Question: Does that mean the airport is an incompatible use? Ron said based on these assumed conditions, if they become reality...(some unintelligible discussion).

Question: How would you account for such a short penetration to the northeast as compared to the penetration on the runway which runs east-west?

Nick said the location of the threshold for takeoff, the location of the threshold for landing are taken into account. Also, the number of operations on that runway for takeoff and landing varies, Nick said. You come up with a mix of operations going in each direction for each track or pattern that the aircraft is flying and for each type of aircraft. You could, if you wanted to, attempt to pull that contour in by moving the threshold.

Nick proceeded to talk about the takeoff and landing patterns. The landing tracks that we used for large aircraft are C-130's since that is what the Forest Service is using. Light aircraft tracks do not influence the model as much as the large aircraft, Nick said. Nick said the tracks were based on patterns that kept large aircraft from flying over the City as much as possible, but for Runway 22 it's not possible to avoid the City.

Question: For landing was a right-hand pattern used? Yes, to keep away from the City. The only significant impact that was unavoidable was to come over Town to land on 22 which unfortunately is their favorite approach because of prevailing winds and the USFS's need for quick turnarounds.

Question: Are we following the same patterns for departure?

Nick said he used a slightly different approach - I figured a straight out departure with a heavily loaded aircraft would climb at 250 feet per minute - not very much climb. We assumed he's not making any turn until he gets to 500 feet.

You have to realize we used the highest end of the forecast, Nick said, in other words, the worst case forecast. It may or may not happen. The noise analysis has to be based on something which is why the assumptions are carefully documented. If it came to a point where it were a significant environmental concern and you had to come up with some sort of mitigation plan, you'd have a tough time restricting operations on 4-22.

Question: Who makes the final decision as to traffic patterns. You, the owner of the airport, Nick said.

Gary: I think these should go in this year.

Comment: Can these be put in the flight manual as such? Nick: You could make it a standard, you could talk to FAA operations.

Question: Does the FAA have to approve what we recommend?

Nick: I don't believe they do. You can work something out with the operators here.

Comment: Wouldn't this be a lot simpler if we said we have right-hand patterns on Runway 11? That would eliminate the problem in the northwest corner.

Nick: Except that when they're fighting fires in the White Mountains they wouldn't want to come that way. You can certainly do it. You can say we don't want you to do this.

Question: What sort of mitigation measures would be required, assuming we left the patterns like that.

Nick: It could vary from restrictive use to only Runway 11-29 for large, noisy aircraft to not allowing jets to take off at night, to restricting operations of the Forest Service, telling them they can't operate here. But that's only going to happen if you have to go through an environmental process wherein the FAA says this is a significant environmental impact. It would take an Environmental Impact Statement, including mitigation measures. But as I said before, the operations are going to have to be in the high end of the forecast.

Question: How high over "that" property would they be flying?

Nick: The Airport Layout Plans show the Approach Slope which indicates a minimum height since aircraft fly above the approach slope. We talked about increasing the approach slope on the VASI on that runway end. The tradeoff there is that if they have to come in steeper they need more power. There are two other things to remember. When you look at this computer model, it has nothing to do with what people's perceptions are. People complain about noise even if they are not in an impact area. If they are used to the noise, they may not complain even though they are in a 65 Ldn area.

Comment(s): We can mitigate a lot if we can get the Forest Service to change their pattern - not fly so low (paraphrased from lots of talk at once). The City intends to meet with the Forest Service to discuss these issues.

Ron continued with a summary of potential environmental impacts as follows:

- noise
- land use

- historic preservation issues
- light emissions from MALSR
- temporary construction impacts

Allan: Should we be proactive with the State Historic Preservation Office and ask them to give us an opinion on the Terminal Building?

Ron, it certainly wouldn't hurt to get their opinion.

Allan: We're working with them now on the Historic Preservation Ordinance, so maybe next time we could review the terminal building.

Nick: That would be great.

Allan: Do you have examples of land use ordinances?

Ron: We can get you some information.

Question: What would happen if the Forest Service didn't use the airport?

Nick: That would be tough to guess. I could run a model and come up with an answer. Keep in mind we also have business jets in the model. If you took the business jets out and left the Forest Service, it would be quieter than if you took the Forest Service out. Another way to look at it is to run the model with the lower end of the forecast. I can do that also. It might not be a bad idea, because the different models can answer different questions depending on what happened. We will do some additional work on this and provide you with some alternate results.

Comment: Did you assume Forest Service operations at night?

Nick: No. Forest Service Operations are daytime.

Questions: If we adopt this Master Plan, can we ask the FAA to do an Environmental Assessment to address the issues in the Master Plan?

Ron: No, an EA is done in conjunction with a specific project like the runway extension.

Ron switched the order of the agenda so Nick could discuss the Airport Layout Plans before the Financial Analysis.

4. Review Section 8 - Airport Layout Plans

We came up with a set of Airport Layout Plans based on the items in the previous working papers, including the forecast, the demand-capacity analysis, the facility requirements and the selected alternative, Nick said. The Airport Layout Plan is the official planning document of

the airport that is approved by FAA. They do not necessarily review and approve the Master Plan. They approve the ALP.

Any construction proposed to be done with public funds must conform to the approved Airport Layout Plan. That's why it's important to come up with a reasonable plan, but also include some things that may or may not occur.

(Nick proceeded to explain various items on the plans. The following are the key items noted).

Sheet 1: Vicinity Map, Wind Coverage, General Data for Airport, Signature Blocks.

Sheet 2: Key sheet showing existing and potential ultimate conditions. Also:

- 11-29 Primary Runway
- Potential extension of Runway 11
- Moved threshold of Runway 29 515 feet to get Head Start School out of the Runway Protection Zone.

You have 9,600 feet of potential runway. If someone comes to Town and asks the questions, you have it, he said.

Question: What is the A.R.P.?

Nick: The Airport Reference point is the centroid of the runways.

Other items on Sheet 2:

- possible installation of a Precision Approach
- details

Sheet 3: The Terminal Area Drawing

- shows existing and ultimate potential of terminal area.
- shows straightening of parallel taxiway and demolition of existing terminal building.
- shows how to separate Forest Service operations from general aviation/light aircraft operations.

There was a question relating to the effect of the blast of a C-130 given the layout shown on the Terminal Area Drawing. Nick said we'll look into it.

- shows locations of both an air carrier terminal and a general aviation terminal
- shows a lighted helipad

Question: What was your thinking about the (location of the) ultimate large aircraft ramp for commuter type aircraft compared with Runway 11-29 being designated the primary runway. Is that going to be a problem?

Nick: I don't think there's a problem. There's a longer taxi time, but it's not excessive. When we're talking commuter airlines, we're talking nothing larger than a Saab 340 or a Beech 1900.

Question: Do you prefer to put that there and put the ultimate hangars on this side? What we tentatively thought was to put the hangars on the other side. I wonder if that's an issue.

Nick: What we tried to do is to keep the GA concentrated here. If you have a guy with a private hangar way over here, he's got to fuel up over here and taxi way over here to the runway.

Sheets 4-7: These sheets are a series of Plan and Profile drawings and Approach Surfaces, Nick said. These identify if there are any obstructions, any penetrations to the approach or transitional surfaces. Nick described the obstructions as noted on page 8-4 of the report. He said if you go to a precision approach, the obstructions will have to be lighted with red obstruction lights or removed. There are also obstructions in the terminal area, including obstructions in the primary surface, the most critical surface. These do not necessarily need to be removed, but they need to be lighted. Some of these would go away when the parallel taxiway is straightened, Nick said.

Nick momentarily skipped Sheet 8.

Sheets 9 and 10: these are the extension of the airport airspace broken into two pieces - southeast and northwest. These show the federal imaginary surfaces. We did find some penetrations of these surfaces by terrain. These are something the FAA would look at when they do your instrument approaches. They may affect your minimums.

Sheet 8: This is the Land Inventory Map - what the FAA used to call the Airport Property Map.

(Nick described the map's contents and concluded the Airport Layout Plan presentation).

Question: Is there a rule of thumb for avigation easement value?

Comment: The temperament of the owner.

Nick: That's about it.

Question: Is it a percentage of the market value of the land itself?

Nick: Not that I'm aware of. Sometimes if it's a cooperative, supportive neighbor, they'll say no problem.

A short discussion ensued as to the existence of avigation easements on the airport. Someone said there is an avigation easement dating back to the 1960's. Nick said it may have to be updated since dimensional requirements have changed.

5. Section 7 - Financial Analysis

Ron said he wrote in the transmittal memo that the financial analysis was a draft. He did this for a reason, he said - there are a lot of assumptions in here. The City provided very good data. He said he'll talk a little later about how the data was used to guess at some trends that might occur in the future.

When we first talked to the City about doing this project we were told that one of the goals of the City was to balance the books at the airport, Ron said. You don't want to have greater expenditures than revenues. When you look at this draft, you can see it's not balanced - for a reason which I'll explain later, Ron said.

Ron referred to the capital improvement program. He reminded the group that Nick had said if a project is listed in the Master Plan, it may be eligible for federal or state funding. If it's not in the plan at all, it won't be funded. This doesn't mean you have to commit to doing these capital improvements tomorrow or fifteen years from now, but at least they are in the Master Plan if you decide you want to do them, Ron said. Nevertheless, what we try to show in here is how this program can be financed if you go ahead with it.

There's a discussion in the Chapter on potential funding sources. Along with that we've taken the development items from Section 4 and created three tables for projects that are proposed for the Immediate Term, the Short Term and the Ultimate Term. The Immediate Term lists projects that should be done for safety reasons or because you're not in compliance, Ron said.

The costs are in terms of today's dollars based on as close to a quantity takeoff as we can do with this planning document, and applying actual unit costs from similar projects, Ron said.

The next part starting on page 7-7 talks about the Financial Program and about various strategies to finance airport development, Ron said.

Ron said he wants to spend most of the time talking about the financial program and hopefully get a lot of feedback about assumptions that we have in here.

Ron went over the City's expenditures - the major categories. He said he did not rename the categories, but used the City's groupings. He lumped expected expenditures into the groups instead of listing them individually.

Ron said he made some assumptions and that may be the best thing to do is to talk about some of these to get a reaction as to whether these are reasonable.

Our page 7-14, under salaries and benefits, Ron said we'll assume a 2% increase in salaries and benefits for 1998 over 1997. For 2003 acknowledge the addition of one staff salary, then increase this expenditure by 10% each five year period.

For utility costs, we used the 1996-97 value as the baseline and added 10% for 1998. For each five-year period, we increased utility cost by 20%.

For liability expenses, we used the 1997 value of $20,682 as the baseline, maintained this value for 1998, but increased it 5% for each five year period.

For depreciation expenses four values were averaged over a five year period and applied this value to every year in the planning period.

For vehicles and vehicle maintenance, seven costs were averaged and the value used for 1998. 10% was then added for each five year period.

A lump sum value of $20,000 was added in 2008 and 2013 for purchase of a vehicle.

For the category "other" a five year average was determined and utilized for 1998, then 5% was added for each five year period.

Question: One of our expenditures is the cost of fuel. The table shows that no figures were available for three years.

Comment: It's under ground maintenance.

Question: But then you say in your report the information is not available, I don't understand that. Back on page 7-15 you say "because there were no expenditures after 1992".

Ron: I'll clarify that. It's clarified later, I'll clarify it sooner.

Comment: I for one would like to see 7-11 show that n/a is not appropriate information on 7-11, say something else.

Question: (not intelligible on the tape recording) - a reference to page 7-6, hangar construction not being eligible for public funds.

Ron: Yes, 7-6 is incorrect, it should be a total local expense (hangar construction).

Question: (not intelligible on the tape) - a reference to the cost assumed for a terminal building on page 7-4 of $50/square foot.

John: You'd get a shell for $50...(unintelligible)

(Some discussion - not intelligible.)

John: The Council took the position that they would support the airport...(not intelligible) and make a decision after that time whether they would continue general fund support.

Question: Is this the first year?

John: This is the first-year. We've got two more years and after that...(many voices)

John: Their number is about $178,000 which is a pretty heavy number for a small airport.

John: Your one number on salaries...we're in the position where we are probably going to reduce the staff rather than add positions. I think it's probably a 35, 40 reduction in salaries. I would imagine your number includes overtime, salaries and benefits?

Ron: Yes, I lumped a bunch of numbers together. I should say the revenue numbers we were given, we took them verbatim. The expenditures, like salaries and benefits, is a compilation of six, seven, eight items.

John: Show a reduction of about 40K.

Ron: Are there any costs, whether they be utilities or vehicles, anything that is going to change the assumptions I've made - similar to salaries and benefits?

John: No. On the revenue side if we have the 24-hour fuel operation, our gas sales will increase.

Question: In terms of reducing salaries, is it better to have the bigger number in the Master Plan? What is the impact of reducing the salary line?

Ron: There won't be any impact. I don't know how a funding agency would look at it - it's just for information. What we attempt to do is look at the revenue stream, the trends, ways to increase it. There are recommendations in here, that certainly doesn't mean it's gong to happen. If the City is fairly certain they are going to drop a staff person, we should show it.

Revenues are more difficult to predict. Expenditures are easier - we can take the record and extrapolate percent increases over the next 20 years. Revenues are entirely different because as John said if the hope is that the 24 hour gas service will increase revenue, but I don't think it's the City's intent or our intent to stop there and say well this is the only revenue source that we can exploit.

John: That's one. Valley Oil told me that there will be a 5 to 10% increase in sales due to the 24-hour operation.

Ron: I've got on page 7-18, the 1996-97 value was used for 1998 and a 20% increase applied every five years.

(Voices)

John: ...I think you're right Harold, I don't think we can make the whole number.

Gary: Take 40% off or better because that would be the actual Forest Service...AV Gas and Jet. We'll be seeing a trend toward the Jet. They'll be dropping off of the 100 octane fuel within a five-year period.

Comment: We did see a drop off of Jet A Gov't sales due to the smaller military presence.

Ron: That's why I used the 1996-97 value as the base rather than the trend. The trend was down. I figured let's use this as the base and show the increased sales which kind of make sense with your new facility.

If you think the 20% each five years might be high.

Comment: I think 20% is a little high.

Ron: That's 4% per year - or 20% over five years. Are you thinking 2% or 3% per year.

Comment: Oh, over five years. I thought you were talking (20%) per year.

Ron: What I did was I broke this down into five year segments because with the improvements you don't know when you're going to do them. What I'll do in the final version of this is break it down year by year. So it would be a 4% increase every year.

Comment: Okay, I misunderstood.

Ron: Regarding rents, I've got them increasing every year, but I'm not sure what the schedule is...do you have input on that? It doesn't provide very much revenue. In terms of "rents, land" I didn't know where the restaurant fell, so I made an assumption. I don't know if this is the right category to make the assumption in.

We have made assumptions in previous Master Plans of a rent on a per acre basis of $200 per acre. Again, we make a very broad statement in here that 50 acres within 20 years may be leased. You really don't know, because you don't know how aggressively it will be pursued. That number could be more, could be less.

John: I think your numbers are conservative and that's probably how they should be.

Don: A Master Plan typically is a straight line projection..take a policy direction. We should develop other scenarios that will be based on the change in that straight line projection. Maybe the group is saying we want to develop these hangars out there immediately. Is there any way you can develop a projection based on that.

Ron: Sure.

Don: What would you need for us to develop some scenarios to see what would happen with various changes that we can make the operation of the airport more financially viable.

Ron: One thing we need is timing. We put hangar development in here but we put them down the road - we don't say tomorrow. The assumption is that we don't necessarily see it happening tomorrow, but it could. Again, there needs to be specific direction. As John said, I erred on the side of being conservative.

Comment: As far as that goes, that's fine.

Don: What we've said here is that we're going to keep plodding along - be the same airport with the 2-3% growth rate. What can we do, what changes in policy, do we need to make to make some real changes within our revenue stream.

Question: Can you make those recommendations?

Ron: We can make those recommendations. One thing I wanted to get out of this meeting - are the basic assumptions correct. I wanted to make sure we're properly interpreting the information we received. But now, what I want to suggest, is that we revise this Section to include recommendations and a schedule that will better fit a scenario that's aggressive. A scenario of if you do this, the revenue stream will increase and maybe, and I'm not saying it will, but maybe it'll balance the expenditures. Because right now there's a deficit. I did that on purpose because I don't want to mislead. If we think that it'll balance within 20 years, plodding along as you say, that's misleading. I cannot presume to know the City will take an aggressive action. But, we can say yes, if you do this, then you've got a program.

What I'd like to do is to revise this Section and include the recommendations today, and send it out for comments, prior to the next meeting.

(Unintelligible voices)

6. Schedule

Ron: Next meeting is scheduled to be a meeting of this group and presentation to Council. Once it's presented to Council, the normal action is to adopt the Masetr Plan.

John: What would happen if you met with this group earlier in the day and they adopted the Master Plan and make a recommendation to Council. Council meets at 7 PM.

Ron: Meet in the middle of the afternoon? That would be a good idea.

The next P.A.C. meeting is scheduled for May 12 at 4 PM. Council will meet at 7 PM.

pc: Attendees
Non-attending Workbook Holders

WINSLOW-LINDBERGH REGIONAL AIRPORT
MASTER PLAN
PLANNING ADVISORY COMMITTEE (PAC) MEETING NO. 4
Gannett Fleming Job No. 31814

AGENDA
March 17, 1998

1. Meeting Minutes - Approve
   - A. P.A.C. Meeting No. 2
   - B. P.A.C. Meeting No. 3
2. Section 1-5: Review Revisions and Approve
3. Review Section 6 - Environmental Factors
4. Review Section 7 - Financial Analysis
5. Review Section 8 - Airport Layout Plans
6. Schedule
   - A. Next PAC Meeting/Council Meeting

WINSLOW - LINDBERGH REGIONAL AIRPORT
PAC MTG # 4 Attendance
3/17/98

NAME	REPRESENTING
Ron Schreier	GANNETT FLEMING
NICK PELA	N.J. PELA & ASSOCIATES
Robert Mansell	COMMISSION
Tom O'Connell	Commissioner
Marvin Hatch	Commission
Allyn Affeldt	"
Gary Carlin	CITY OF WINSLOW
John Rocco	City
DON E. McDANIEL	WINSLOW
Harold D. Doehner	City council
Suzy Witzel	City
Tom Schultes	Winslow Mail (newspaper)

MEETING MINUTES
WINSLOW-LINDBERGH REGIONAL AIRPORT
MASTER PLAN

P.A.C. MEETING NO. 5

Date: July 14, 1998

Attendees:		
	Ron Schreier	Gannett Fleming, Inc.
	Nick Pela	Nicholas J. Pela & Associates
	John Roche	City of Winslow
	Gary Carlson	City of Winslow
	Matthew Lee	Intern, City of Winslow
	Robert Mansell	Winslow Airport Commission
	Jerry Sullivan	U.S. Forest Service
	Tom O'Connell	Winslow Airport Commission
	Nancy Moore	U.S. Forest Service
	Suzy Wetzel	City of Winslow, Commission Secretary
	Marvin Hatch	Winslow Airport Commission
	Shane Preston	Winslow Airport Commission

Minutes Prepared By: Ron Schreier

The meeting discussion generally followed the agenda attached. The major points of discussion are noted below:

1. "Housekeeping" Items

Ron Schreier handed out copies of Figures 5-1 to 5-5 to be inserted in the Executive Summary section of the workbooks. These were inadvertently left out of the mailing.

John Roche said to substitute Shane Preston for Steve Haydukovich on the Commission.

2. Meeting Minutes

The minutes for PAC Meeting No. 4 were approved unanimously.

3. Section 1-5

Ron said certain pages in these sections were revised and redistributed to correct typos and to add the commission approval dates for each section onto the first page of each section.

There were no questions or comments on these sections.

4. Section 6: Environmental Factors

Ron said correspondence exhibits 6-10 were received and added since the last meeting. The text was updated based n the comments received. Ron said Nick revised the noise analysis based on comments received at the last P.A.C. meeting.

Nick reminded meeting attendees that the aviation forecast in Section 2 has a low end and a high end, thus providing a range of forecast activity. The new noise analysis reflects this range, he said, by providing noise contours based on the low end activity and t he high end activity. Based on the new noise analysis, Figures 6-1 to 6-4 were revised. The four noise exposure scenarios modeled are: (1) Existing general aviation and U.S. Forest Service (USFS) operations; (2) 2017/18 High-range general aviation and USFS operations. This represents a worst-case scenario; (3) 2017/18 High-range general aviation and no USFS operations; and (4) 2017/18 Low-range general aviation forecast and the 1997 USFS activity

A recommendation was made for the City of Winslow to overlay a "noise zoning" layer onto the other land-use zoning. It was suggested to use the 65 Ldn contour to determine the limit of that zoning.

Nick also reviewed Figures 6-5 and 6-6. Figure 6-5 illustrates the airport traffic patterns assumed for the noise analysis. Figure 6-6 is a comparison of the 55 Ldn contours for the four noise exposure scenarios.

5. Section 7: Financial Analysis

Ron said this section was revised since last meeting. His statements are paraphrased as follows: It is difficult for a general aviation airport in Arizona to operate without receiving "subsidies" from the owning government entity. Ron said some general aviation airports in Arizona have been successful since they have developed niches (tourism, aviation education, industrial parks, heavy recreational flying, business-related flying, etc.) which are able, with the help of government grants, to support the airports. Winslow-Lindbergh Regional Airport has some such activity, but without an aggressive campaign to attract and keep business and other interests it will not be possible for the airport to be maintained and operated without a City subsidy. This is not to say that development of airport revenue sources will guarantee a balanced budget. Ron recommended several basic measures as follows.

1. Review airport expenditures with a goal to reduce these as much as possible.

2. Establish a rate structure for leases, hangar rents, tiedown fees, landing fees, etc. and pursue these consistently, but without turning away potential customers.

3. Be mindful of what competitors re doing. Make adjustments as necessary to stay competitive.

4. Be aware of potential opportunities for developing revenue-producing businesses on the airport. Pursue these aggressively.

Shane Preston asked with regard to the administration expenditures, how many employees does the budget reflect? Gary said one full-time and one seasonal, part-time.

John Roche said two years ago the City Council said they were willing to subsidize the airport with money from the General Fund for another five years. There are three years left. The issue of airport subsidies will be revisited by the Council at that time.

6. Section 8: Airport Layout Plans

Nick said changes were made to the Airport Layout Plan based on FAA/and ADOT comments. These were mostly cosmetic changes. Nick briefly reviewed the 10 drawings with the attendees.

Shane asked if the consultants were able to conform to FAA and ADOT comments. Nick said "Yes".

7. Approval of Sections 6-8

The commission unanimously approved Sections 6-8.

8. Other Comments

Ron said that the Master Plan has identified various obstructions, including many that have a power source (light poles, power poles, etc.). He said that the remaining funds in the FAA and ADOT-Aeronautics grants for the lighting project may be able to be used to fund the installation of obstruction lights on the objects that have power sources. Since we have a good electrical contractor on board, Ron suggested that the City consider giving him a change order to install obstruction lights. John Roche said to prepare the necessary documentation for this.

9. Adoption of Master Plan

The commission voted unanimously to adopt the Master Plan.

10. Council Meeting

Ron said that based on John Roche's suggestion, he and Nick will spend about 10 minutes tonight at the City Council session providing a general overview of the Master Plan and a description of the type of "niches" that could be developed for the airport. Ron asked if the committee members wanted any else to be mentioned? There were no other items mentioned for discussion at the Council meeting.

pc: Attendees
Non-attending Workbook Holders

Gannett Fleming

WINSLOW-LINDBERGH REGIONAL AIRPORT
MASTER PLAN
PLANNING ADVISORY COMMITTEE (PAC) MEETING NO. 5
Gannett Fleming Job No. 31814

AGENDA
July 14, 1998

1. Meeting Minutes - Approve

   A. P.A.C. Meeting No. 4

2. Section 6: Review Revisions and Approve

3. Section 7: Review Revisions and Approve

4. Section 8: Review Revisions and Approve

5. Other Comments

6. Consider Approval of Master Plan

7. Agenda for Council Session

WINSLOW MUNICIPAL AIRPORT

Comprehensive Airport Master Plan 1997-2018

PROJECT INFORMATION SHEET #1

Project Introduction

The joint-venture firms of Gannett Fleming, Inc. and Nicholas J. Pela & Associates have been retained by the City of Winslow, Arizona to prepare a comprehensive Airport Master Plan Study for the Winslow Municipal Airport..

In the Study, analysis will be made of the factors affecting the future development of the airport, and recommendations will be presented which, when implemented, will assure that the airport will develop consistent with the demand placed upon it.

The Study will focus on three main points:

- To provide recommendations for cost-effective repair and rehabilitation of the existing airport to assure a safe operating environment, and provide an attractive location for new business development.
- o provide realistic recommendations for future airport improvement which will assure that the airport will accommodate its future demand, in terms of aviation safety and capacity as well as future commercial growth.
- To identify realistic alternatives for development.

The twenty-year planning period of the Study covers calendar years 1997 through 2018.

Project Approach - the PAC Process

The master planning process will use the "Planning Advisory Committee" (or PAC) team approach. PAC team members are persons who are interested in the outcome of the airport planning process, and who are willing and able to commit the time and resources necessary to provide timely review of all information submitted by the Consultant. Although all PAC team members need not have an aviation background, some aviation/airport knowledge and interest is helpful.

Review of the Master Plan documents is undertaken on an ongoing basis during the project term. Each PAC member begins with an empty notebook (the PAC Workbook). As each phase of the Plan is completed by the consultant, Working Papers are prepared and copies are distributed to each PAC member for review. PAC meetings are scheduled at key points in the process in order to discuss and ultimately approve each planning element Working Paper, as submitted by the Consultant.

As each progressive element of the planning document is completed by the consultant team and approved by the PAC, it becomes a part of the PAC Workbook. When all elements of the work are completed, the PAC Workbook is approved and becomes the final Master Plan.

Work Outline

To date, inventories and field investigations of the airport's buildings, pavement, and utilities have been conducted. A basis for activity projections has been established based on the results of these investigations, as well as extensive research of existing demographic, economic, and other record information.

Over the next several months, the consultant team will develop forecasts of aviation activity for the 20-year period, and recommendations will be presented for correcting any current areas of noncompliance.

The next phase of the work will focus on the airport' historic buildings. Alternatives will be devised which will address the future disposition of the Terminal Building and the Hangar, which were built by Transcontinental Air Transport (TAT) in 1929. These buildings played an important part in establishment of the first transcontinental airline service. The alternatives may include designation of the buildings as Historic Landmarks, renovation, demolition, or relocation.

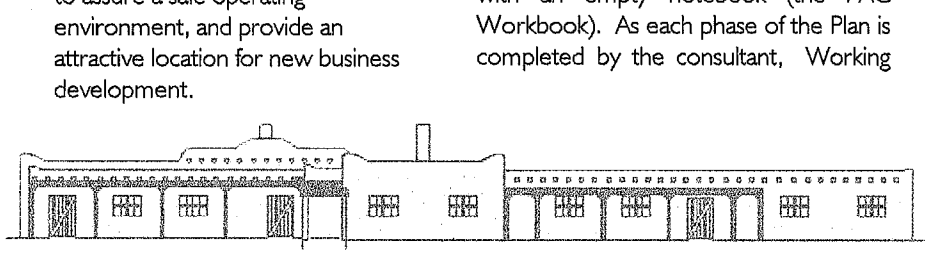
Public Involvement

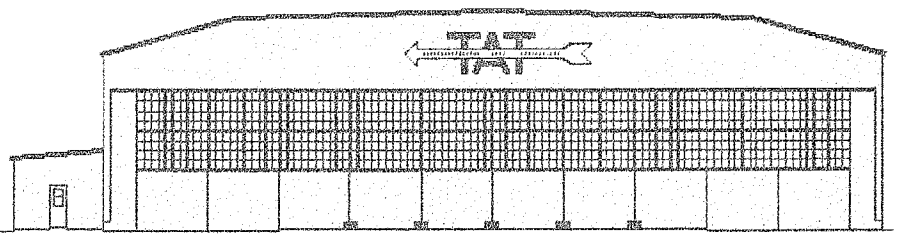
Several Public Information Meetings will be convened during the course of the planning project. At these meetings, the public will be kept informed as to the progress, findings and recommendations of the studies, and input and comments by the public will be solicited.

The Public Information Meetings are scheduled to occur at strategic points in the planning process.

If you would like additional information, please contact:

Nicholas J. Pela
(602) 404-3768
e-mail: njpela@aol.com





Visit the Winslow Municipal Airport public informational Web Site at http://members.aol.com/airport102/inw.htm

WINSLOW MUNICIPAL AIRPORT

Comprehensive Airport Master Plan 1997-2018

PROJECT INFORMATION SHEET #2

Aviation Activity Forecasts

As part of the Master Plan process, the Consultant team has prepared estimates of aviation activity at the Winslow Airport. It is estimated that there are currently about 12,800 operations (landings and takeoffs) per year.

There are currently 10 light aircraft based at Winslow. The Consultant's research indicates that this level has declined from 37 aircraft in 1979 and 21 in 1987. It is believed that this is a reflection of the general downturn in general aviation activity nationwide. This national trend is in the process of improving with the recent passage of improved product liability reform legislation coupled with a general improvement in the national economy.

The City of Winslow, with federal and state financial aid, will be improving the existing facilities in order to provide a safer and more attractive environment. These improvements may foster a rapid increase in activity at the airport, if coupled with an aggressive business development and marketing plan by the City. In the short term, operations may increase to about 18,700 annual operations.

The forecasts include both a "Low-Range" and a "High-Range" projection for the 20-year planning period. The Low-Range projection assumes that activity will increase at a moderate rate of growth from the estimated actual level of 12,800 annual operations. The High-Range projection assumes rapid initial growth in business related activity, then a moderate increase through the remainder of the planning period.

The projected increase in activity through the project planning period (1997-2017) is as presented in the chart at right.

U.S. Forest Service Operations

The U.S. Forest Service maintains a fire-control operations base at the Winslow airport, flying modified piston and turboprop powered aircraft for application of Borate during the fire season.

Over the past ten years, Forest Service activity has averaged 278 operations annually. Highest use was in 1996 (668), and the lowest use was in 1992 (32). There were 68 operations conducted during the 1997 fire season.

It is projected that Forest Service activity will continue to vary, but that this activity may increase to over 500 annual operations in the future.

Critical Aircraft

The "critical" or "design" aircraft for an airport is defined as that aircraft (or group of aircraft) whose dimensional and/or performance characteristics are the basis for selection of design criteria. The critical aircraft must account for at least 500 annual operations.

The verifiable critical aircraft currently using the Winslow facilities is a mix of business jets, which together account for nearly 700 annual operations. Projections indicate that activity by this type of airplane may increase to over 3,900 annual operations by the year 2017. Design of the recommended facilities will take this into account, along with the potential increase in U.S. Forest Service use.

If you would like additional information, please contact:
Nicholas J. Pela
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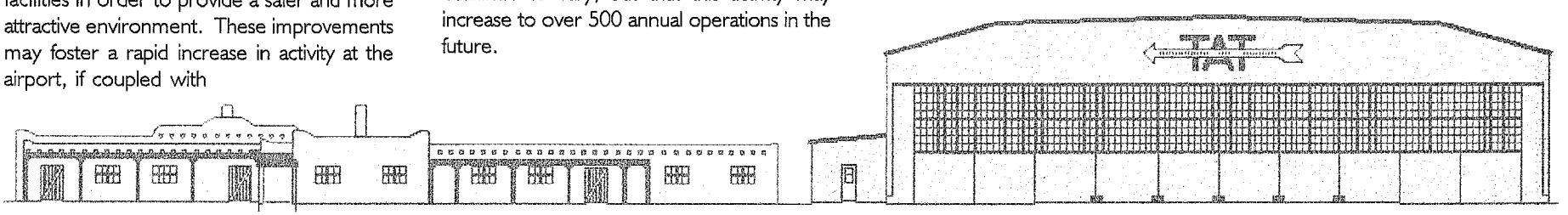
e-mail: njpela@aol.com

Aviation Activity Forecasts
Winslow Municipal Airport 1997-2017

	Current 1997 Estimate	After Initial Improvement	Low-Range 2017 Estimate	High-Range 2017 Estimate
Based Aircraft	10	10-16	17	24
Total Annual Operations	12,811	18,700	22,000	40,000



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